

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**7**

**DECISION**

**TOPIC**

**Nonpoint Source Pollution Control Project Contracts**

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Commission approval is requested for the following 18 contracts for nonpoint source (NPS) pollution control projects. The total amount of the contracts is \$3,134,400.

The funds for these contracts will come from the FFY2005 Section 319 grant, contingent upon receipt of the grant award. This EPA grant is awarded specifically for these nonpoint source pollution control projects. Funding from other state and federal programs is also being used to support many of these projects. Most of these projects are multiple year projects and Commission approval is being sought for the entire project periods.

The Section 319 funds to be provided during the entire project period, project descriptions, and the activities supported with the Section 319 funds are provided below.

**Contracts with the Iowa Department of Agriculture and Land Stewardship, Division of Soil Conservation (IDALS/DSC):**

- **South Fork Maquoketa River Water Quality Project, Buchanan County, \$150,000 -**  
This contract will support a two-year extension of an ongoing project to protect and improve the overall water quality within the South Fork watershed and decrease the amount of pollutants delivered to the Maquoketa River and Backbone Lake (which is on Iowa's Section 303(d) list of impaired waters). BMPs to be promoted include: waterways, filter strips, contouring, no-till, timber stand improvement, tree planting, wetland restoration, animal waste systems, nutrient management, and streambank stabilization. Water quality monitoring will be conducted, along with a comprehensive information/education component. Contract funds will be used to support a full-time project coordinator, associated project costs, and financial incentives for BMP implementation.
- **Big Wall Lake Restoration Project, Wright County, \$186,050 -** This contract will support a new project sponsored by the Wright County SWCD to improve the water quality of Big Wall Lake. Big Wall Lake is included in Iowa's Section 303(d) list of impaired waters due to exotic species. The state's assessment concluded common carp have infested the water body and by their feeding actions cause the re-suspension of sediment, high turbidity and lack of submergent and emergent vegetation. This project proposes to install an outlet structure designed to drawdown the lake, allow the lake to freeze or treat small deeper areas with Rotenone to kill fish populations, and then keep the lake dry for sufficient time to allow for regeneration of the plant community. In addition, an information/ education component will be conducted to document and promote the project. Contract funds will be used for

construction of the outlet structure, wetland restoration and dike repair, to support the I/E activities and to support the ¼ time project coordinator.

- **Deer Creek and North Branch Sub-sheds of Clear Creek, Iowa and Johnson Counties, \$250,000** - This is a new a new three year project to protect and improve the water quality of Deer Creek and North Branch, two tributaries of Clear Creek, which enters the Iowa River approximately 4 miles upstream from the University of Iowa water intake. Assessments accomplished through a Development Grant, a SWAT analysis and snapshot water quality sampling identified the Deer Creek and North Branch sub-sheds as contributing high levels of sediment and E. coli to Clear Creek. These assessments also identified areas to be targeted for treatment or management improvements. BMPs proposed include: filter strips, contour buffer strips, grassed waterways, nutrient management, animal waste facilities, etc., with a goal of reducing sediment delivery by 30% and to reduce E.coli to no more than 235 MPN. In addition, water quality monitoring will be conducted and an information/education program will include: landowner meetings, news releases, meetings, etc. Contract funds will be used to support a project coordinator and associated costs, and financial incentives for the BMPs.
- **Burr Oak/Turtle Creek Water Protection Project, Mitchell County, \$150,000** - This contract will support a new three-year project to protect and improve the water quality of Burr Oak and Turtle Creek. Both streams are coldwater trout streams, with Turtle Creek currently being stocked by IDNR and used extensively for trout fishing. Burr Oak is currently not being stocked with trout, however it has exhibited some level of natural reproduction of brown trout. Landowners, IDNR Fisheries staff, and ISU extension have identified nutrients, animal wastes and sediment as impacting water quality of the two streams. BMPs proposed to address these concerns include: animal waste facilities, conservation buffers, streambank stabilization, nutrient management, grassed waterways, wetlands, riparian buffer, etc. In addition, an information/education program will be conducted to include: landowner meetings, news releases, meetings, etc. Contract funds will be used to support a project coordinator and associated costs, and financial incentives for the BMPs.
- **Water Quality in Rathbun Lake: BMPS for Targeted Sub-Watersheds 2005, Wayne, Lucas, and Decatur Counties, \$250,000** This contract will support a new two-year project specific to Upper Fivemile Creek (Lucas and Wayne Counties), Chariton River #1 (Decatur and Wayne Counties), and Upper Ninemile Creek (Wayne County) watersheds and is a prioritized component of the overall and ongoing efforts being undertaken in the Rathbun Lake watershed. BMPs to be promoted include: terraces, grade stabilization structures, sediment control basins, ICM practices, improved grazing practices, riparian forest buffers and filter strips. GIS technology will be used in planning and evaluation of the effectiveness of the BMP implementation. Water quality monitoring will be conducted, along with a comprehensive information/education component. Contract funds will be used to support a project coordinator and associated costs, and financial incentives for the BMPs.

- **Bear Creek Watershed Project, Delaware County, \$300,000** - This contract will support a new three-year project sponsored by the Delaware County SWCD to protect and improve the water quality of Bear Creek. Bear Creek is a warm water stream which is included on Iowa's Section 303(d) list of impaired waters due to a number of fish kills in past years attributed to animal waste discharges. The Bear Creek watershed is intensively farmed with hogs, beef cattle, dairy and row crop. GIS assessment of the watershed and input from a local watershed board has identified priority areas to be targeted for practice implementation. BMPs to be promoted include: grassed waterways, terraces, water and sediment control basins, no-till incentives, contouring, filter strips, streambank stabilization, etc. In addition, water quality monitoring will be conducted and an information/education program will include: landowner meetings, news releases, meetings, etc. Contract funds will be used to support a project coordinator and associated costs, and financial incentives for the BMPs.
- **Clean Water – Lyon County Demo, Lyon County, \$204,500** - This contract will support a new three-year project sponsored by the Lyon County SWCD to demonstrate how to economically address water quality problems associated with open feedlot cattle operations, specifically in northwestern Iowa. This project will establish demonstration sites at 6 nonpermitted feedlots in the western part of Lyon County draining to the Big Sioux River, which is included on Iowa's Section 303(d) list of impaired waters due to fecal coliform bacteria, suspended solids, and biological. These demonstration sites will use alternative, cost effective measures to maintain or grow cattle feeding businesses in Lyon County in an environmentally friendly manner. The 6 sites will be established on various sized operations. Watershed Development grants were provided in 2003 and again in 2004 to complete an assessment and inventory of current livestock operations. This information will be used in determining the demonstration sites and to measure the effectiveness of the practices. An intensive information/education campaign will be conducted to promote these alternative systems throughout northwestern Iowa. Contract funds will be used to support a half-time project coordinator and associated costs, costs to establish the demonstration sites, and support for the information/education program.
- **Addressing Siltation and Nutrient Water Quality Problems in Badger Creek Lake Watershed, Madison County, \$300,000** - This contract will support a new three-year project sponsored by the Madison County SWCD to protect and improve the water quality of Badger Creek Lake. Badger Creek Lake is included on Iowa's Section 303(d) list of impaired waters due to excessive siltation and nutrients. Badger Creek Lake is considered a valuable recreational and fishing resource in the area. Nonpoint pollution through gully, streambank/streambed, sheet and rill, and shoreline erosion are contributing to the poor water quality of the lake. A local watershed assessment and the TMDL document prepared by IDNR staff identified the priority areas to be targeted for BMP implementation. BMPs to be promoted include: terraces, sediment basins, grade stabilization structures, prescribed grazing, grassed waterways, pasture and hayland planting, buffers, nutrient management, wetlands, etc. In addition, an information/education program will be conducted to promote the project throughout the watershed using field days, news releases/articles, signage and volunteer water quality monitoring. Contract funds will be used to support a project coordinator and associated costs, and financial incentives for the BMPs.

- **Mineral Creek Water Quality Project, Jones County, \$77,000** – This contract will support a one-year extension of an ongoing project to protect and improve the water quality of Mineral Creek. Mineral Creek has been determined to be delivering excessive sediment, nutrients and bacteria to the Maquoketa River. BMPs being implemented include grassed waterways, water and sediment basins, terraces, buffer strips, streambank stabilization, wetlands, animal waste control facilities, and nutrient and pest management programs. Contract funds will be used to support project staff, associated project costs, and financial incentives for BMP implementation.
- **Camp Creek Watershed Project, Polk County, \$100,000** - This contract will support a one-year extension of an ongoing project to protect and improve the water quality of Camp Creek, which is on Iowa's Section 303(d) list of impaired waters. The focus of project activities will be on a corridor approximately ½ mile on each side of the stream. A secondary focus will be the corridors of tributary streams. BMPs to be promoted include: riparian buffers, grass filter strips, streambank stabilization, nutrient management, grazing management, and timber stand improvement. Contract funds will be used to support a full-time project coordinator, associated project costs, and financial incentives for BMP implementation.
- **Clear Lake Enhancement and Restoration Project, Hancock and Cerro Gordo Counties, \$100,000** - This contract will support a one-year extension of a project to protect and improve the water quality of Clear Lake. Clear Lake and the associated Ventura Marsh are both listed on Iowa's Section 303(d) list of impaired water. Project activities include nutrient management demonstration sites, nutrient management practices, wetland construction for stormwater filtration, no-till and other conservation tillage practices. This project also includes information/education activities. Contract funds will be used to support salary and benefits for the project coordinator and associated costs, and financial incentives for BMP implementation.
- **Lake Darling Water Quality Improvement Plan, Washington County, \$100,000** This contract will support a one-year extension of an ongoing project to protect and improve the water quality of Lake Darling. Lake Darling is included on Iowa's Section 303(d) list of impaired waters. Impacts identified include sedimentation and nutrients, primarily from agricultural activities. Practices being promoted throughout the watershed include: terraces, water/sediment basins, grade stabilization structures, nutrient/pest management, no-till, buffers, etc. A water quality monitoring program and an information/education component are included in the project's activities. Contract funds will support part-time staff, water quality monitoring costs, and financial incentives for BMP implementation.
- **Rock Creek Lake Watershed Improvement Project, Jasper County, \$90,900** - This contract will support a one-year extension of an on-going project to protect and improve the water quality of Rock Creek Lake, listed on Iowa's Section 303(d) list of impaired waters. This project is implementing a variety of BMPs to reduce sediment and nutrient delivery to the lake, with considerable emphasis on use of large ponds and other structural practices within the major drainageways of the watershed. Contract funds will be used to support a full-time staff person and expand and accelerate BMP implementation in this watershed.

### **Contract with Northeast Iowa Resource Conservation and Development Inc.:**

- **Assessing, Targeting and Tracking of Impaired Watersheds in Northeast Iowa, Winneshiek, Allamakee and Howard Counties, \$127,200** – This contract will support an expansion of an ongoing project to protect and improve water quality in the Upper Iowa River Watershed to include the Turkey River and Yellow River watersheds. This project is sponsored by the Resource Conservation and Development for Northeast Iowa Inc., in partnership with the Winneshiek, Allamakee and Howard County SWCDs. The project provides support for developing projects within the targeted watersheds with GIS assessments and data collection, tracking of practices and documenting water quality improvements of such. Contract funds will be used to support the GIS staff and associated costs. (USEPA has awarded funding to support the project coordinator.)

### **Contract with River Action, Inc.:**

- **Scott Community College Bioswale and Green Roof Learning Experience, \$25,000** This is a new one-year project sponsored by River Action, Inc., Davenport, Iowa. The city of Bettendorf and Scott County Community College are cooperating to complete a major campus renovation of a former grocery store building. A bioswale and green roof will be installed as part of this renovation. These practices have the potential to significantly reduce the quantity of stormwater runoff and the contaminants, specifically sediment and nutrients, contained in the runoff. These practices will then be promoted through the environmental education program offered through Scott County Community College and through an information/education program to be completed by River Action, Inc. Contract funds will be used to partially support the installation of the bioswale and the green roof, and to support the information/-education program. (Significant contributions of other agencies and organizations are supporting the majority of this overall project.)

### **Contract with Pottawattamie County Conservation Board:**

- **Hitchcock Nature Center – Sustainable Design Demonstration, \$63,750** This contract will support a new one-year project. This project is a small component of a larger, overall project to renovate existing facilities at the Nature Center to demonstrate sustainable design practices. Pervious paving will be installed at the Nature Center to demonstrate practices to reduce potential runoff which also can be utilized throughout the entire fragile Loess Hills area. Contract funds will be used to partially support the pervious paving installation. (Significant contributions of other agencies and organizations are supporting the majority of this overall project.)

### **Contract with University of Iowa/University Hygienic Laboratory:**

- **Assessment and Management Plan for the Iowa Great Lakes Watershed, \$260,000** This is a new project sponsored by DNR to complete a watershed assessment in the Iowa Great Lakes Watershed. Urban and rural point and nonpoint pollution sources impacting water quality will be identified. The assessment will then be used to develop a watershed management plan focusing on targeted areas within the watershed and recommending conservation practices for such areas. Contract funds will be used to support 1/3 of the

Project Coordinator's salary/benefits/associated costs, a GIS specialist, and contractual services to complete the watershed assessment. (Significant contributions from other agencies and organizations will support the remaining 2/3 of the Project Coordinator salary/benefits/associated costs.)

#### **Contract with Conservation Districts of Iowa**

- **Memorandum of Agreement for Staffing Assistance, \$300,000** – The agreement will allow for DNR to contract with the Conservation Districts of Iowa (CDI) to provide 2 staff positions to DNR for Geographic Systems Information assistance and 1 staff position for the Stormwater Manager position. These positions are critical to allow continued support of DNR's efforts to address nonpoint source pollution on a statewide basis. Agreement funds will support salary, benefits and CDI indirect costs.

Wayne Gieselman  
Administrator  
Environmental Services Division  
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